WTO Research and Analysis for 2000 Economic Research Service

OVERVIEW

In 2000, ERS research on WTO issues addresses upcoming agricultural negotiations under the WTO, highlighting quantitative analysis of multilateral trade liberalization, technical barriers to trade, developing country interests in the WTO, Uruguay Round disciplines and new issues, and the effects of trade liberalization on commodity markets. Related to analysis underpinning negotiations is research on the impacts of expansion of WTO membership to include China and Taiwan, The objective is to inform both policy makers and stakeholders of the key issues and impacts of trade liberalization. Results of analysis will be disseminated through a variety of publications, workshops, and briefings.

ERS research on the WTO negotiations on agriculture aims to answer questions about the impacts of alternative strategies for agricultural trade liberalization. A major challenge is to provide a global perspective on options under the three main disciplines in the Uruguay Round Agreement on Agriculture (URAA)--market access, domestic support and export subsidies-through quantitative analysis of multilateral trade liberalization. In order to analyze options for agricultural negotiations, a 16-country/region trade model incorporating WTO policy instruments is scheduled for completion this year. Existing computable general equilibrium (CGE) models that incorporate WTO policy instruments such as tariff rate quotas (TRQs) will be used to examine economy-wide impacts of trade liberalization scenarios. A trade database highlighting market access data for WTO member countries will be completed and disseminated.

The special interests of developing countries in the WTO will be further explored through quantitative analyses of impacts of trade liberalization on developing countries. Other analysis addresses analytical gaps related to specific policy instruments, commodities, or countries. Examples include the impacts of the European Union (EU)'s preferential access agreements, the economics of TRQ administration, and the relationship between trade liberalization and the use of antidumping duties. A major new undertaking will examine commodity trade issues to provide better understanding of the impacts of trade liberalization on individual commodity markets. The impacts of China's accession to the WTO will be analyzed, and the global agricultural trade implications of Taiwan's membership will be assessed.

Research on technical barriers to trade focuses on quantitative analyses of SPS and TBT issues, examining the non-scientific determinants of questionable trade barriers and investigating the effects of technical barriers on the world poultry market. Research in this area also reviews the outcomes of SPS disputes during implementation of the SPS Agreement and assesses the effects of the Agreement on developing countries.

KEY OUTPUTS

A wide range of outlets for analysis of trade liberalization serves to reach policy makers in a timely manner, inform the general public, and spur research by other institutions. The "WTO Briefing Room" on the ERS web site (www.ers.usda.gov/briefing/wto) provides easy access to all

ERS published output on the WTO and multilateral trade liberalization. Several research publications are planned for 2000, with a focus on the quantitative analysis of multilateral trade liberalization. A major report will present the results of quantitative analyses of liberalization options within each of the three core areas (market access, export subsidies, domestic support). Another report will present analyses of patterns of protection using tariff profiles developed from the market access database, a companion to a technical report documenting the database. The economics of tariff-rate quotas will be the subject of a technical bulletin. Articles analyzing commodity market issues relevant to multilateral trade liberalization and commodity market concerns in the new agricultural negotiations will appear in ERS commodity reports. A report that provides a comprehensive examination of commodity market issues, including analyses of cross-commodity issues, will get underway late in the year. Country-specific questions and "new issues" will be featured in ERS information bulletins and *Agricultural Outlook*. ERS staff will also present research results at meetings of agricultural and trade economists and in professional journals.

PLAN OF WORK: SPECIFIC PROJECTS

QUANTITATIVE ANALYSIS OF MULTILATERAL TRADE LIBERALIZATION

Global analysis of agricultural trade liberalization. The goal of this project is to identify and prioritize options for achieving further trade liberalization in the new WTO negotiations on agriculture. The primary focus of the project will be to evaluate policy options related to the three core areas of the negotiations: market access, domestic support, and export subsidies. This will be done by analyzing alternative liberalization scenarios, including full liberalization of each of the three areas (to identify the core area with greatest potential gains for the U.S.), and full liberalization of all three core areas (to assess the total costs/benefits of existing agricultural distortions). The global analysis will rely on static and dynamic CGE models that will provide aggregate and economy-wide impacts of liberalization scenarios. The analysis will allow comparisons across disciplines to achieve specific objectives such as expanding exports and maximizing welfare. The project will calculate the benefits (and costs) to the U.S. and major regions of the world, including developing countries, of reducing or removing agricultural trade barriers, domestic support, and export subsidies. Effects on the U.S. farm sector, including regional effects and distribution by farm type, will be presented. The results of this research will be presented in a report scheduled for publication in late 2000 or early 2001.

WTO model. A new, partial equilibrium model of the grains, oilseed, and livestock sectors (including dairy) plus sugar is under development to analyze liberalization of policies established in the URAA—tariffs, TRQs, export subsidies, and domestic support. The model builds on existing ERS country models and development focuses on incorporating current domestic policy regimes and developing techniques for analyzing URAA policies. The model will provide greater commodity disaggregation as well as greater delineation of policy instruments than the CGE models used in the Global Analysis project (above). The prototype contains models for the EU, Japan, U.S. and a rest-of-world region. The prototype model will be extended to include 16 other major countries/regions in agricultural markets and representative regions (e.g., developing countries with different characteristics). The model will be completed and tested this year and will be used to analyze trade liberalization scenarios for the new negotiations on agriculture.

Database development. ERS has participated in a joint effort with a number of institutions to develop a tariff database that can be used to analyze market access issues. The Agricultural Market Access Database includes raw data on market access commitments, including bound and applied tariffs (for 1998 and other years as needed for modeling), TRQ commitments and notifications, and imports. The database also provides tools for aggregate analysis of protection, including calculation of *ad valorem* equivalents, commodity averages, and weighted-average tariffs. Other policy data on export subsidies, AMS notifications, PSEs for OECD countries are being collected and will be put in a format compatible with the market access data. The database is scheduled for public release mid-year. A report analyzing patterns of protection using tariff profiles developed from the database will be published this year.

Review of trade and commodity models. Project will review trade and commodity models that could be applied to analyses of agricultural trade liberalization. An annotated bibliography of publications describing these models will be prepared based on this review. The purpose of the project is to document the range of models available for trade liberalization analysis and to provide in summary form an assessment of the relative strengths and weaknesses of each. The bibliography will is planned for publication on the ERS WTO briefing room.

Evaluation of agricultural liberalization under APEC vs. WTO. Efforts to liberalize agricultural trade are occurring at the regional as well as multilateral level. Regional agricultural trade negotiations may result in more comprehensive agricultural policy reform than multilateral liberalization. The research project will undertake a comparative quantitative evaluation of agricultural trade liberalization in APEC vs. WTO, updating a 1998 analysis of this issue.

Service sector liberalization and agriculture. Negotiations to liberalize trade in services and agriculture are proceeding under the Uruguay Round's so-called "built-in agenda." Service sector liberalization can affect the agricultural sector through their role as important inputs to agricultural production and trade. Research will apply a CGE modeling framework to develop quantitative estimates of the effects of various trade liberalization scenarios in the service sector on agriculture.

COMMODITY MARKET IMPACTS OF MULTILATERAL TRADE LIBERALIZATION

Commodity market issues in trade liberalization. To complement the more aggregate analysis of agricultural trade liberalization, this project focuses on identifying and analyzing trade issues important to individual commodities. A series of articles will analyze issues relevant to multilateral trade negotiations for the sugar, wheat, feed grain, dairy, livestock and poultry, cotton, tobacco, and oilseed sectors. The articles will evaluate the most important results of the Uruguay Round, assess the key remaining distortions in these commodity markets, and identify issues for new agricultural negotiations. Articles will be featured in the commodity yearbooks, situation reports, and the WTO briefing room.

Commodity market impacts of multilateral trade liberalization. This project will build on the findings of the commodity market issues research, using the results of these studies to develop trade liberalization scenarios for further analysis. A partial equilibrium trade model will be used to develop quantitative estimates of the impacts of trade liberalization on major commodity groups (wheat, feed grains, rice, oilseeds, cotton, sugar, dairy, and livestock products). The results will be presented in an ERS report scheduled for publication in early 2001.

Oilseed market trade liberalization. The world oilseed market is generally less protected than many other agriculture sectors, although trade distortion exists through tariff rates, differential export taxes, and domestic support policies. A multi-regional, multi-sector general equilibrium analysis of the impacts of a "zero for zero" scenario—an approach involving a reciprocal elimination of duties among major trading countries--of trade liberalization scenarios for the oilseed sector will be undertaken. The research will also assess the impacts of equalization of tariff rates among oilseed products and the effects of improved access to the Chinese market for oilseeds and oilseed products. A research paper documenting the methodology and results of the analysis will be presented at the AAEA meetings in August 2000.

TECHNICAL BARRIERS TO TRADE

Analyzing technical barriers to trade. Previous analysis of technical barriers to trade has produced an economics-based classification for types of measures and estimated impacts on individual markets. This project extends that work by focusing on quantitative analyses of SPS and TBT issues. The project undertakes an econometric analysis of non-scientific determinants of questionable trade barriers and investigates the effects of technical barriers on the world poultry market. Research in this area also reviews the outcomes of SPS disputes during implementation of the SPS Agreement, examines how the Agreement may constrain the use of economic analysis in regulatory decision-making, and evaluates implementation of the Agreement to assess its effects on developing countries.

DEVELOPING COUNTRY ISSUES IN MULTILATERAL TRADE LIBERALIZATION

Developing countries, which constitute the majority of WTO members, are increasingly active participants in multilateral trade negotiations. Current and future WTO negotiations will witness significant participation by developing countries in setting the agenda for negotiations and in reaching agreements on different issues. Developing countries have agricultural trade interests in such wide-ranging topics as preferential trade arrangements, technical assistance, biotechnology, and state trading enterprises. The issues vary in importance by geographic region and by relative income levels. Research emphasizes developing quantitative estimates of the impacts of trade liberalization on developing countries.

Implications of trade liberalization for food security of developing countries. The project will evaluate the results of the CGE analyses of global analysis of trade liberalization to assess how global commodity impacts and developing country impacts may affect the food import balance of food-importing developing countries. The results will be presented in an article in the global analysis report.

Developing country impacts of trade liberalization. Research is underway to develop and adapt a model for analyzing quantitative estimates of the effects of trade liberalization on developing countries. The partial equilibrium model will allow analysis of individual developing countries, and will be used to evaluate the impact of changes of developing country preferences.

Preferences for SubSaharan Countries under the Lome Convention. The Lome Convention provides preferential treatment for exports from developing countries in Africa, the Caribbean, and the Pacific to the EU. In particular, the Lome Convention waives the quotas on textiles and clothing established under the MultiFiber Arrangement (MFA). This project will measure the extent of preferences to African countries for exports of products covered by the MFA, and will identify constraints to expansion of production and exports of these products in African countries.

Tariff escalation and developing countries. Tariff escalation may disadvantage developing countries by impeding access to world markets for processed products. The project will analyze the impact of reduction of tariffs on processed agricultural commodities on export earnings of selected Sub-Saharan African countries.

Multilateral trade liberalization in the LAC region. The project will use a computable general equilibrium framework to quantify the economic impacts of multilateral trade liberalization in the Latin American and Caribbean region.

UNDERSTANDING URUGUAY ROUND DISCIPLINES AND NEW ISSUES

Research in this area will address analytical needs related to specific policy instruments and URAA disciplines, including domestic support and market access. The project will analyze issues associated with possible new areas for negotiations.

The economics of TRQ administration. A comprehensive paper will provide an overview of the economics of tariff-quota administration. The paper study will evaluate various methods of TRQ administration in terms of their likelihood to inhibit or bias. The study will provide case

studies of some specific examples of TRQ administration. An analysis of U.S. TRQs for peanuts, sugar and tobacco will be the subject of a journal article and a contribution to a working paper for the International Agricultural Trade Research Consortium.

EU market access issues. A framework for assessing market access issues will be presented in a briefing paper for the ERS WTO Briefing Room. Research on EU Preferential Access Agreements will evaluate the WTO implications of these agreements.

Antidumping. The use of the antidumping remedy is a contentious issue among WTO members. A conference paper and briefing paper for the WTO Briefing Room will document the rise of antidumping cases by WTO member countries and will investigate the relationship between trade liberalization and the use of antidumping duties.

Use of the Balance-of-Payments (BOP) waiver. Work will get underway this year by ERS researchers to investigate the use of the WTO Balance-of-Payments waiver by India to maintain quantitative import restrictions.

U.S. Policy Evaluation Matrix (PEM) model. The PEM is a tool for use in evaluating the effects of U.S. (and other countries') domestic agricultural policies. Development of the U.S. model as part of OECD's PEM project will continue. The model will be expanded to include the dairy sector and links made to PEM models for other countries.

Trade distortion from domestic support. Disciplines for domestic support in the URAA are based on individual policies' degree of trade distortion. This research will develop a conceptual framework for understanding how various forms of domestic support affect production and/or consumption, and thereby trade. Factors to be considered are how payments are tied to inputs or outputs, the amount of the payment, interrelationships between the specific program and other domestic programs and border measures, and underlying economic parameters such as output supply and input elasticities. Emphasis will be on the effects of programs in a partial equilibrium framework. Related research will be presented in two conference papers: one analyzes how decoupled is U.S. support for major crops, and the second evaluates the WTO implications of North American farm programs.

Multifunctionality in agriculture. The concept of multifunctionality of agriculture is expected to be an issue that will have to be addressed as part of the continuing discussions of distortions affecting agricultural markets and trade. ERS research analyzes the economic issues related to the debate over multifunctionality in agriculture. The work will be published as an ERS report.

EU domestic support programs. Domestic support will be the subject of debate in future multilateral agricultural trade negotiations. Research will address how current and projected agricultural policy will affect EU support to agriculture, and will highlight the production and trade impacts of policies exempt from reduction commitments under the "green box." The project will assess the budgetary effects of policy options, and will seek to determine how constraining the EU's budget will be for future agricultural policy.

CHINA AND TAIWAN WTO ACCESSION

China's WTO accession. After years of negotiations, the U.S. and China have concluded a bilateral agreement that will pave the way toward China's accession to the WTO. ERS research focuses on providing quantitative estimates of the trade and production impacts of China's entry into the WTO. Specific projects include a partial equilibrium assessment of the agricultural provisions of the U.S.-China bilateral agreement; a multiregional CGE evaluation of China's WTO membership that focuses on implications of TRQ implementation for the agricultural sector; and an analysis of the global and domestic (Chinese) impact of China's accession using a single-country China CGE model and a global CGE model.

Taiwan's WTO accession. An ERS study will assess the provisions and evaluate the global agricultural trade implications of Taiwan's access to the WTO.